The Natural Capital Workflow

This explainer presents BHP's Natural Capital Workflow (NCW), and documents our natural capital accounting and assessment approach. Created under BHP's direction and reviewed by CSIRO for consistency with the methodology described in the CSIRO *Natural Capital Handbook*, the NCW offers a practical and systematic framework that enhances clarity, transparency and broader understanding.

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The Natural Capital Workflow

Organisations today face growing pressure to respond to the twin crises of nature loss and climate change. These challenges are not only environmental – they have direct implications for organisational strategy, risk management and long-term value, particularly as global expectations increase around transparency and accountability for impacts and dependencies on nature and the goods and services it provides.

Yet, despite the potential competitive advantage associated with effectively managing nature-related impacts and dependencies, many struggle to navigate the complex landscape of nature-related frameworks, standards and data requirements. The Natural Capital Workflow (NCW) was developed by BHP as an illustrative pilot tool to explore how organisations might navigate the complexity of nature-related frameworks, standards and data requirements. It sets out a series of practical and logical steps aligned with the systematic structure of natural capital accounting and assessment described in CSIRO's Natural Capital Handbook. The NCW includes a hypothetical case study application and is shared for explanatory purposes only. Organisations may use and adapt it to meet their own purposes, where they see value. The NCW is designed as a two-phased workflow to enable the selection of locally relevant science-based metrics, across a consistent and credible structure that will support nature-related risk management and reporting in a way that is aligned with a broad range of international requirements.

This explainer introduces the NCW and explains how to apply it to support nature-related reporting and / or decision-making. The NCW is intended for use by those wanting to lead the development of metrics and data on nature-related issues within organisations, such as environment and sustainability reporting teams. The NCW offers an actionable step-by-step process to drive nature-related data compilation in a consistent, repeatable, yet flexible way across a range of operational and organisational contexts and uses.

Problem statement

In response to growing global recognition that nature loss creates material risks for organisations, there has been a rapid expansion of nature-related risk management frameworks and reporting requirements. Together these frameworks often require organisations to collect and report a large number of metrics to support disclosure of impacts and dependencies across multiple reporting regimes. While these developments reflect important progress, their rapid proliferation has created complexity, confusion and uncertainty, particularly in the absence of a single, practical approach that organisations can use to develop credible, science-based nature-related data. As a result, this complexity is increasingly acting as a barrier to effective corporate action on nature.

Opportunity

Whilst individual frameworks are often targeted at specific issues, when considered collectively they support a holistic set of nature-related issues (e.g. natural capital stocks, flows, obligations, impacts, dependencies, risks, and opportunities, see Figure 1). There is overlap in the broad requirements of these frameworks as they all use a natural capital framing, even if this is not explicitly stated, and this creates an opportunity to increase the efficiency and utility of efforts to systematically assess, quantify and report on a range of nature-related impacts and dependencies.

BHP identified an opportunity to explore how the requirements of global nature-related risk management, reporting and disclosure frameworks could be brought together using the systematic structure of natural capital accounting and assessment set out in CSIRO's Natural Capital Handbook. The handbook outlines the steps organisations can take to develop holistic metrics and data across nature-related issues. However, there remains a gap in practical guidance on the specific metrics and global classifications systems to apply when gathering data for different nature-related issues. Addressing this gap is important to support effective and credible nature-related data development. Existing guidance does not yet provide a clear, practical synthesis of framework requirements or workflows to support alignment across multiple global nature-related frameworks. The NCW seeks to help address this gap and, whilst acknowledging that there is potentially still considerable evolution with respect to metrics internationally, does so in a way that is flexible to future developments. In doing so, the NCW aims to provide clarity for organisations on how to structure a response to these global framework requirements using a single, coherent set of metrics/data.

	GLOBAL NATURE-RELATED FRAMEWORKS (NON EXHAUSTIVE)										
	ACCOUNTING → ASSESSMENT										
NATURAL CAPITAL INFORMATION	UN SEEA-CF 2013	UN SEEA-EA 2021	BSI NCA for Org's Spec. 2021	GRI BD Standard 2024	TNFD 2024	Align Project 2022	ESRS 2022	SBTN 2023	Natural Capital Protocol 2016	Project Transparent 2023	Impact Accounting 2023
Asset extent	■	■	■	■	■	■	■	■	■	■	■
Asset condition		■	■	■	■	■	■	■	■	■	
Ecosystem services	■	■	■	■	■	■	■	■	■	■	
Asset obligations	■		■				■				
Impacts	■	■	■	■	■	■	■	■	■	■	■
Dependencies	■	■	■	■	■	■	■	■	■	■	
Risks / Opportunities			■	■	■	■	■		■		

KEY	■	Information required or suggested by this framework

Figure 1. The NCW is designed to promote the alignment of natural capital metrics with a diverse range of international reporting frameworks (note: this figure is illustrative and does not cover all frameworks evaluated).

Proposed solution

The NCW aims to address the confusion and uncertainty caused by framework proliferation by outlining a series of practical steps (Figure 2) to support the development and use of a single set of credible (science-based) nature-related metrics in line with emerging global expectations for nature-related risk management and reporting.

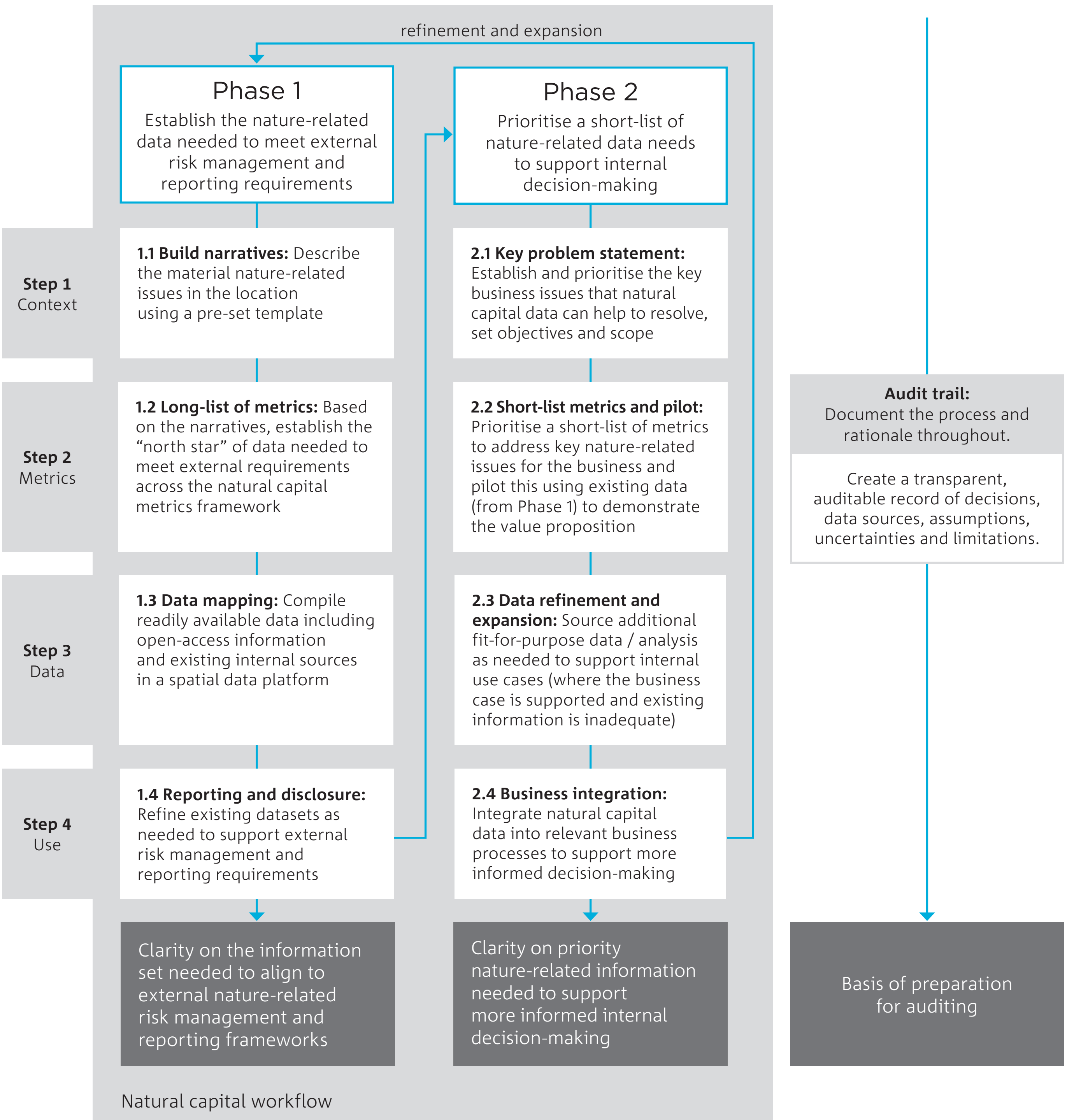

Figure 2. Overview of the Natural Capital Workflow

The NCW utilises the systematic structure of the CSIRO Natural Capital Handbook (Figure 3) which encourages consistency with existing statistical standards such as the United Nations System of Environmental, Economic Accounting[1] and the Natural Capital Protocol, ensuring that there is strong alignment across a range of global risk management and reporting frameworks (e.g. UN SEEA, ESRS, GRI, TNFD). It spans a comprehensive set of nature-related metrics to inform management decisions and support reporting based on:

- **Stocks** – What is the status of the natural capital assets that the organisation stewards across a specific geographic area?
- **Flows** – What is the productivity and value of these natural assets to the business and society based on the ecosystem services they generate?
- **Obligations** – What are the costs associated with legal or voluntary responsibilities to restore, maintain or enhance natural assets?
- **Impacts** – How does the organisation affect nature and its value (positively or negatively) in that location?
- **Dependencies** – How does the organisation rely on nature for its services in that location?
- **Risks** – What risks arise from the organisation's impacts and dependencies on nature in that location?
- **Opportunities** – What opportunities exist to enhance value through better stewardship in that location?

The NCW provides flexibility to adapt the selection of metrics to specific geographic contexts and a hypothetical example of its application is provided in an accompanying Microsoft Excel workbook.

1 https://seea.un.org

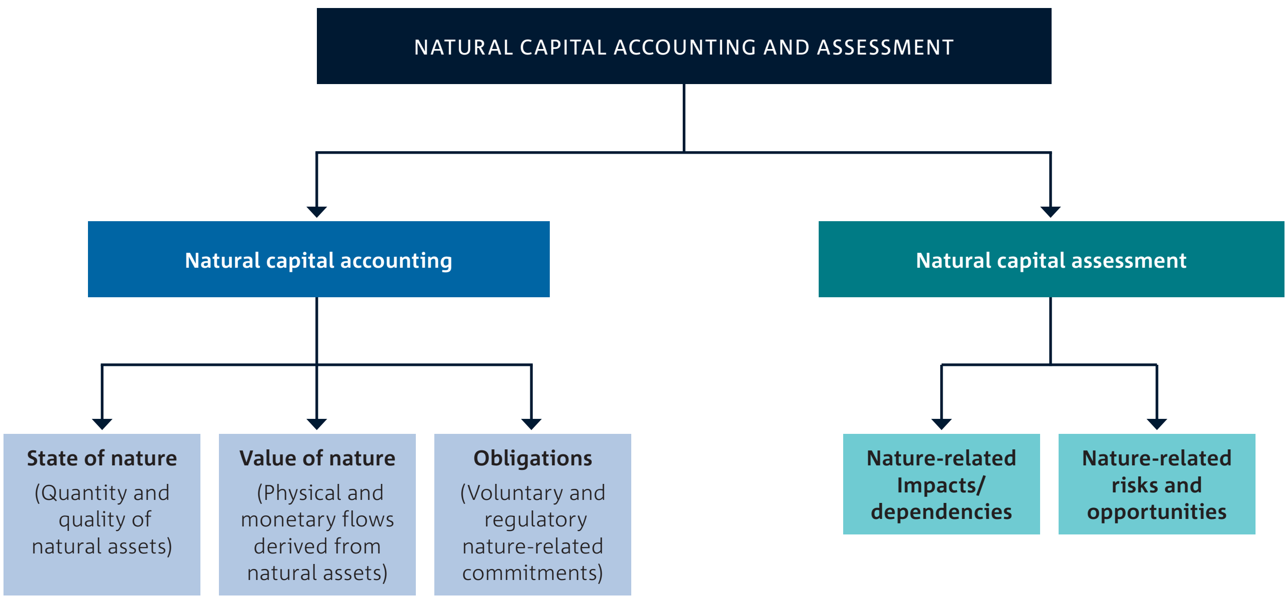

Figure 3. Broad overview of the structure recommended in CSIRO's *Natural Capital Handbook* that has been adopted in the NCW

In addition to guiding the selection of natural capital metrics, the NCW provides advice on the use of standardised classifications (e.g. IUCN ecosystem types, CICES ecosystem services classification, FAO land use classes), and demonstrates interoperability across global framework requirements, with a specific focus on the development of metrics that can support broader disclosure requirements with the aim of promoting consistency and comparability in responding to these.

The structure of the NCW aims to be holistic in its consideration of nature-related information (i.e. natural capital stocks, flows, obligations, impacts, dependencies, risks, and opportunities). Developing metrics and data across this structure effectively captures the intent of a wide range of global nature-related reporting frameworks, i.e. to understand and improve organisational performance in relation to its stewardship of nature. Furthermore, the NCW retains the flexibility to respond to future evolution in existing framework requirements or the emergence of new frameworks, promoting confidence within organisations to get started on nature-related data development and use.

Finally, the NCW supports the prioritisation of data development to meet specific internal use cases, by establishing where quantification can help to resolve material nature-related issues for an organisation. This ensures that data is not solely compiled for disclosure purposes but can also be integrated into all levels of decision making, driving improved outcomes for business, people and nature.

THE NCW IS a practical, hands-on approach that organisations can use to guide them through the identification, development and use of nature-related metrics and data.

THE NCW IS NOT another framework. It aims to guide the organisations responses to the emerging nature-related risk management and disclosure requirements by providing a single, consistent and pragmatic approach to nature-related data development based on the systematic structure of CSIRO’s *Natural Capital Handbook*.

THE NCW IS FLEXIBLE and can support a range of internal **USE CASES** for nature-related data, including:

- assessment of current and future nature-related performance
- tracking progress towards organisational targets or obligations
- comparing options
- certification by third parties
- screening and assessment of nature-related risks and opportunities.

Conclusions and recommendations

Applying the NCW priorities can help provide clarity on the information set needed to align to external nature-related risk management and reporting frameworks (i.e. a long-list of metrics) as well as the priority information needed to improve internal decision-making for a specific use case (i.e. a short-listing of priority metrics for a particular internal application). Credibility is provided through alignment to CSIRO's *Natural Capital Handbook* as well as established international standards and classifications for accounting and assessing natural capital. This provides confidence on what to measure and why, helps address the confusion and uncertainty caused by nature-related framework proliferation.

Organisations may wish to explore the NCW, and to collaborate and share learnings regarding its validity in driving:

- improved understanding and management of natural capital assets
- consistent and comprehensive natural capital data collection and reporting
- enhanced decision making and risk management based on credible and robust metrics and data
- enhanced monitoring and evaluation of nature-related targets and commitments
- improved reporting and disclosure through close alignment with global reporting frameworks and standards.

Additional testing of the NCW may uncover further opportunities to refine the application and use of the NCW. Whilst the NCW has been designed primarily for internal BHP use, it may have broader applicability. Addressing these opportunities could promote uptake of the NCW and ultimately the mainstreaming of natural capital accounting and assessment to support better outcomes for business, people and nature.

Acknowledgement

This explainer and the associated excel workbook were developed as part of an ongoing partnership between BHP and CSIRO, supported by BHP. The partnership between the two organisations aims to support the uptake and adoption of natural capital accounting and assessment in organisational decision making.

The Natural Capital Workflow and associated Natural Capital Metrics Framework (NCMF) was developed by Phil Cryle, Principal Natural Capital at BHP, independently of this partnership. CSIRO, as the developer of the Natural Capital Handbook, provided a review of the NCMF under a separate BHP commissioned project and has contributed to the development of the hypothetical case study of the NCW in the associated excel workbook.

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Contact us

1300 363 400
csiro.au/contact
csiro.au

For further information

CSIRO
Anthony O'Grady
CSIRO Environment
anthony.ogrady@csiro.au

BHP
Phil Cryle
Principal Natural Capital
phil.cryle@bhp.com

B&M | 25-00177